## **ABSTRACT**

Title: SELECTIVE MESH REFINEMENT

The invention concerns a method for coding an original mesh representing a three-dimensional object, which consist in determining a simple meshing having a reduced number of defined faces each defined by vertices and edges, then coefficients in a wavelet base of a function whereof said source mesh is the image defined on said simple mesh, so as to supply successive refined meshes. The method is characterized in that each of the faces of said meshes is subdivided into a limited number of facets to form the higher level mesh, the subdivisions of said surface corresponding only to those required for observing an affinity condition of said function of said face. The invention also concerns the corresponding method for reconstructing the mesh.